PUBLIC HEALTH REPORT

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Venereal Disease in California

CALIFORNIA HAS THE fourth highest venereal disease (VD) rate in all 50 states and San Francisco the second highest rate among cities in the nation. In 1969 reported VD cases topped the 100,000 mark for the first time in the state's history, with 11,000 cases of syphilis and 90,000 of gonorrhea. It was the eighth consecutive year that VD headed the list of notifiable communicable diseases.

Last year 241 cases of congenital syphilis were reported. More than 500 syphilitic insane persons are cared for in California's mental health hospitals at an annual cost of \$3 million. California taxpayers also spend over half a million dollars annually to aid the syphilitic blind.

It is estimated that this year the actual (as distinct from reported) number of VD cases will be 500,000. One in ten Californians under 25 will have VD this year and this age group will account for over half the state's cases. Many are repeaters. In some areas 20 percent of the high school students will have VD before graduation and in a few high-incidence areas more than 50 percent will become infected.

Using federal funds the State Department of Public Health conducts an effective statewide program primarily to prevent and control syphilis. A state core staff of 11 persons and 55 locally assigned workers provide case-finding services to 53 counties and medical and education services to all 58

Venereal disease workers visit public and private laboratories to enlist their help in reporting all reactive tests for syphilis. They follow up test results to ensure that infected persons receive treatment and to locate the source and the spread contacts for new cases. They visit practicing physicians to acquaint them with the vp program, to offer available health department facilities, services and consultation and to encourage prompt reporting and interviewing of vp cases. Local health departments provide vp clinics and some work closely with "free clinics" which are springing up throughout the state.

The state VD workers direct an educational pro-

gram to teachers of junior and senior high school students. They carry on information and education activities through television, radio and the press and with public and voluntary agencies. Professional education activities are directed to physicians and hospitals, departments of health and schools of medicine, nursing and public health.

Since 1962, when President Kennedy's Task Force on Syphilis reported, federal funds and personnel have been available for syphilis control. The U.S. Public Health Service, in cooperation with state and local health departments, began a concentrated attack on this disease. The attack is reflected in a significant downward trend since 1963.

Neither federal funds nor personnel are assigned to the control of gonorrhea, the most common of the venereal diseases and the only one increasing in California. Over the past decade, the incidence of gonorrhea has increased three-fold. The complications of gonorrhea include arthritis, sterility, urethritis, prostatitis, gonorrheal conjunctivitis of the newborn and occasionally death. Thousands of women are admitted to hospital each year for pelvic inflammatory disease and many require hysterectomy because of chronic gonorrhea. Direct medical costs for treatment of gonorrhea in California, not including the late medical consequences of the disease, are conservatively estimated at \$6.5 million

Many of the methods used to control syphilis can be applied to gonorrhea although the short incubation of the latter makes control of transmission more difficult. Recent laboratory research includes work on a new serologic screening test for gonorrhea which may soon be available to detect asymptomatic cases. Judging from frequent findings of unsuspected disease in pelvic examinations, asymptomatic gonorrhea is increasing. Surveys have shown that 3 to 11 percent of laboratory cultures are positive for gonorrhea in women who have pelvic examinations in general clinics, including planned parenthood and prenatal clinics.

A number of private physicians consider screening of women for gonorrhea important enough to study means of implementing the procedure in private medical practice. Carbon dioxide incubators help make gonorrheal cultures less expensive and more practical for physicians. Small incubators for offices utilize candles to obtain low oxygen tension and are adaptable for culturing gonococci.

Last year the California Legislature amended Section 4322, Business and Professions Code, to permit physicians and public health officers to give prophylatic advice for prevention of VD. Venereal disease clinics now give such advice, including use of a condom during sexual relations, and the advisability of washing with soap and water immediately after, and douching before and after sexual relations.

The biggest obstacles to VD control are public apathy and misplaced morality. Many persons, including professionals, believe that VD is as in-

evitable as death and taxes. Many others look upon VD as a moral rather than a public health issue. Another barrier is reluctance on the part of physicians to provide "epidemiologic treatment" to persons known to have been exposed. Public health clinics treat such persons, and a few private physicians do so. Also, we desperately need vaccines against syphilis and gonorrhea. A vaccine against gonorrhea could bring a decided reduction in one or two years. Unfortunately, research into these vaccines has low priority.

As the campaign against syphilis demonstrates, VD can be reduced, but much greater public awareness and support are required. If the medical profession and public health authorities join with the people of the state in a strong effort, it will be possible to control these costly diseases as we have controlled other communicable conditions.

POLYMIXIN B FOR PSEUDOMONAS EYE INFECTIONS

"I reported some years ago after a study in premature infants that the usual commercially prepared polymixin B eye drops are clinically less effective in treating pseudomonas eye infections than pure, freshly made up polymixin B which you get from taking the aerosporin powder and making it up 10,000 units per ml with saline and diluting it. I have had a number of discussions about this with the Burroughs-Wellcome people over the years. They could not understand why this would occur because almost all pseudomonas are so highly sensitive to polymixin B in vitro that 6.25 micrograms per ml of the drug will inhibit them and you get 100 times that much in the eye drops. However, they are beginning to admit that maybe some of the polymixin B is bound to the glass or the plastic in the container. . . . I believe that this concept will become accepted.

"In serious pseudomonas infections, we have had much better results with freshly made up polymixin B, at least in getting rid of the bacteria—maybe not in saving the eye, than with the commercial preparations. It doesn't make much difference to Burroughs-Wellcome because they make all forms of the polymixin B; they have no axes to grind in selling the drug. They are going to sell it one way or another as long as you use their product."

—ROBERT P. BURNS, M.D., Portland Extracted from *Audio-Digest Ophthalmology*, Vol. 7, No. 3, in the Audio-Digest Foundation's subscription series of tape-recorded programs.